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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,685	10/24/2003	Paula J. Armstrong	GP-303041	8662

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EXAMINER

PANG, ROGER L

ART UNIT	PAPER NUMBER
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3681

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/693,685

Applicant(s)

ARMSTRONG ET AL.

Examiner

Roger L Pang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2-13-2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

The following action is in response to application 10/693,265 filed on October 24, 2003.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martyka in view of Fujikawa, in further view of Shindo. With regard to claims 1 and 2, Martyka teaches a power transmission comprising: a transmission housing 46 an input shaft 22, an output shaft 24; a first planetary gearset 26, second planetary gearset 28, and a third planetary gearset 30, the sun gear 58 of said second planetary gearset being continuously connected with said input shaft for co-rotation therewith, said ring gear member 50 of said first planetary gearset and said planet carrier member 76 of said third planetary gearset being continuously connected with said output shaft for co-rotation therewith, said planet carrier member 56 of said first planetary gearset and said ring gear member 60 of said second planetary gearset being continuously interconnected, said planet carrier 66 member of said second planetary gearset and said ring gear member of said third planetary gearset being continuously interconnected; a first torque-transmitting mechanism 34; a second torque-transmitting mechanism 46; a torque-transmitting mechanism 42; a fourth torque-transmitting mechanism 36; and a fifth torque-transmitting mechanism 32, each of said torque-transmitting mechanisms having a piston actuator (Col. 2). Martyka does not teach of a three-section transmission housing. Fujikawa teaches a transmission with a first end wall H1,

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second end wall H4/H3, and an outer housing H2 joining said walls. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Martyka to employ a sectional transmission housing in order to facilitate easier assembly. Martyka also lacks the specific teaching of piston support regions. Shindo teaches a similar transmission, with pistons (Fig. 2) supported within wall portions (on front and end walls) and within the transmission. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Martyka to employ piston support regions in view of Shindo in order to provide a compact transmission case comprising both the gearing and respective torque-transmitting mechanisms. With regard to claim 3, Martyka teaches the transmission further comprising: the servomechanisms of the first 34 and fourth 36 torque-transmitting mechanisms and the servo mechanisms of the second 40 and third 42 torque-transmitting mechanisms are substantially coaxially aligned (as defined by the present invention). With regard to claim 4, Martyka teaches the transmission further comprising: said servomechanism of the first 34 and second 40 torque-transmitting mechanisms having respective pistons thereof substantially coaxially aligned (as defined by the present invention). With regard to claim 6, Martyka teaches the transmission further comprising: said servomechanisms of said second 40 and third 42 torque-transmitting mechanisms having the respective pistons thereof substantially coaxially aligned (as defined by the present invention).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martyka in view of Fujikawa in further view of Shindo as applied to claim 2 above, and further in view of Frost. Martyka teaches the transmission, wherein the pistons of the first 34 and fourth 36 torque-transmitting mechanisms are substantially radially aligned, but lacks the teaching wherein the

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servomechanisms of the second 40 and third 42 torque-transmitting mechanisms being radially stacked and supported on said front end wall. Frost teaches a transmission wherein two brakes 86/84 are radially stacked and supported on a wall extension 60b. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Martyka to employ radially stacked brakes in view of Frost in order to save on axial space.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Beim and Nakayama have been cited to show a similar transmissions.

Kundermann, Kubo and Kell have been cited to show similar piston/clutch structures.

FACSIMILE TRANSMISSION

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is (703) 305-3597. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check.

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Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (703) 305-3597) on _____ (Date)

Typed or printed name of person signing this certificate:

(Signature)


If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roger L Pang whose telephone number is 703-305-0445. The examiner can normally be reached on 5:30am to 4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 703-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Roger L. Pang
Patent Examiner
Art Unit 3681

September 27, 2004